Gulf of Mexico Harmful Algal Bloom Bulletin

15 September 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: September 12, 2005

Conditions: A harmful algal bloom has been identified from northern Pinellas to southern Collier County. Today through Saturday patchy moderate to high impacts are possible in Pinellas, Manatee and Sarasota Counties; and patchy low to moderate impacts in Lee and Collier Counties. Patchy very low to low impacts are possible in each of these counties Sunday and Monday. A harmful algal bloom has also been identified from Bay County east to Dixie County. Today through Friday patchy low to moderate impacts are possible in Bay, Gulf, Franklin and Wakulla Counties; and patchy moderate to high impacts in Taylor, Dixie and Levy Counties. Patchy very low to low impacts are possible in these Panhandle counties Sunday and Monday. Dead fish have been reported from Barefoot Beach to Marco Island in Collier County over the past few days. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

Analysis: The ongoing bloom persists along the coast of Southwest Florida, extending from northern Pinellas to southern Collier County. Satellite imagery indicates the bloom has expanded further southward and closer to shore. This is concurrent with sampling results confirming the presence of *K. brevis* at Big Marco Pass in Collier County and also with results of a transport model indicating bloom expansion approximately 30km southward since September 12. Dead fish have been reported in Pinellas, Lee, and Collier Counties over the past few days. Low to medium concentrations of *K. brevis* were found this week offshore Clearwater with low counts persisting at the mouth of Tampa Bay and Venice. Chlorophyll levels are >50μg/L offshore of northern Collier County at 26°17'N, 82°21'W and are continually high along the coast from the mouth of Tampa Bay to Marco Island in varying intensities. Northwesterly and westerly winds through Saturday may increase impacts along the coast. Offshore winds will likely minimize beach impacts on Sunday and Monday. Reports of discolored water are likely. Continued southern expansion of the bloom is likely.

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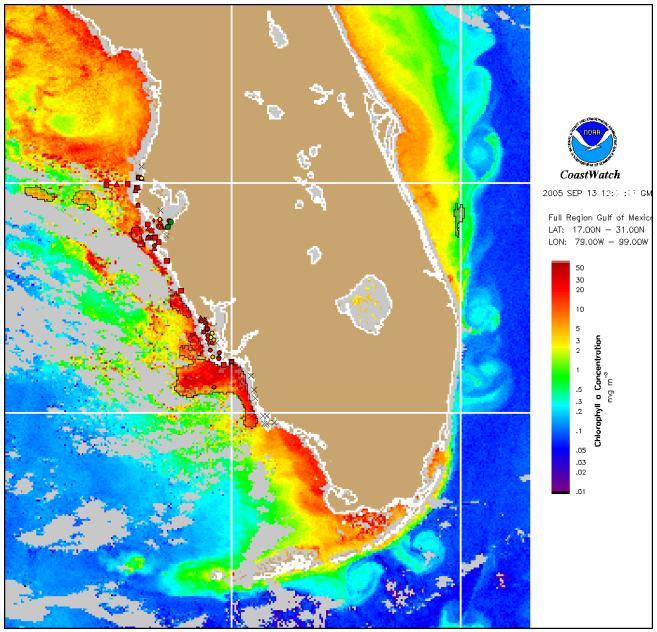
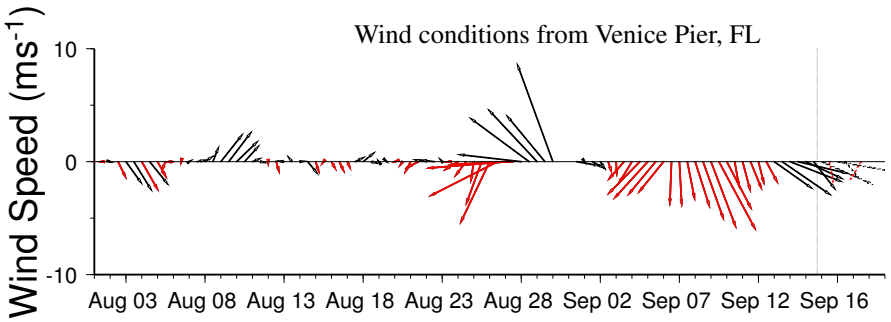
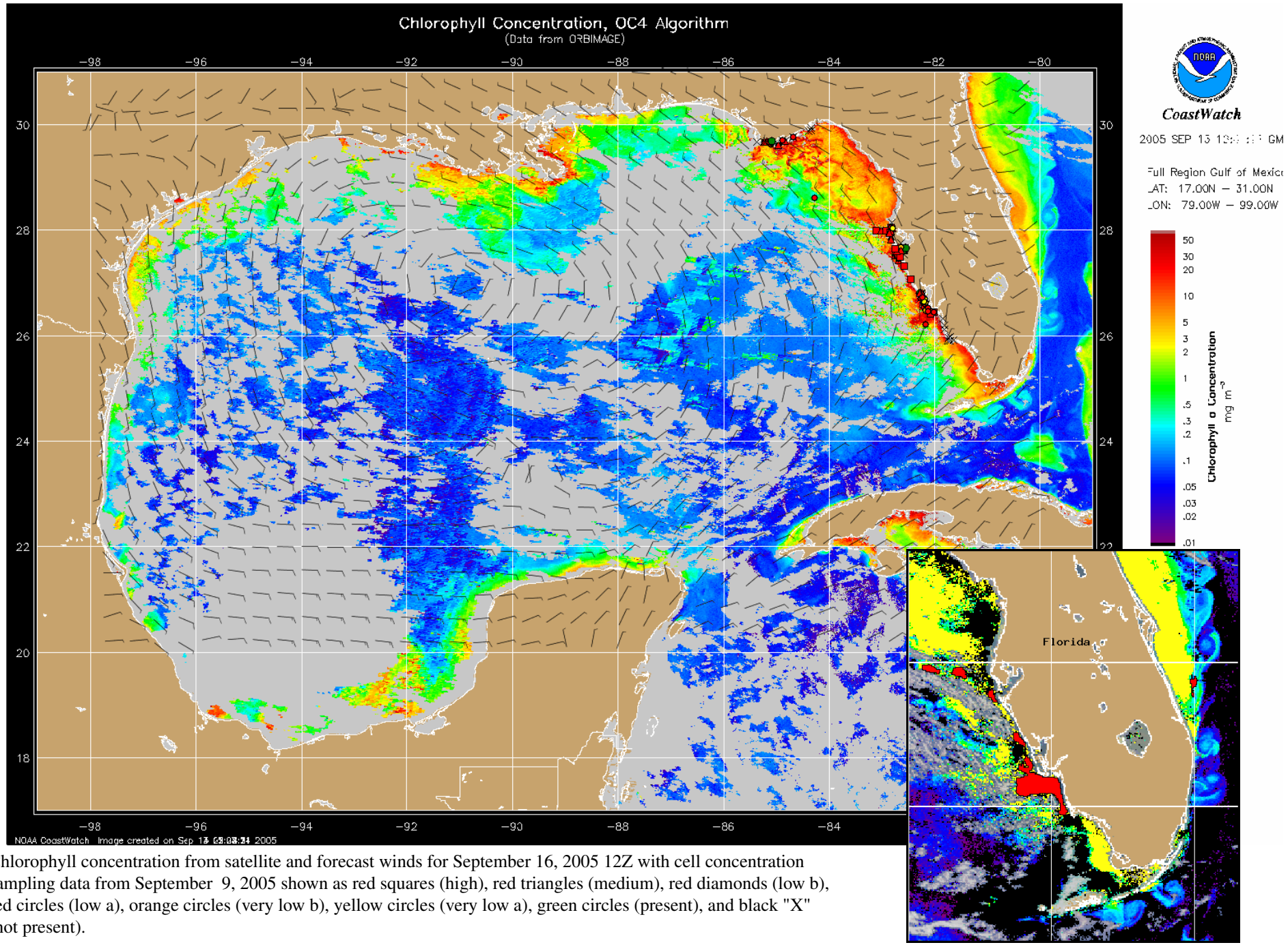


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from September 9, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northwesterly winds through tonight at 5-10 knots (3-5 m/s), becoming westerly Friday and returning to northwesterlies Friday night into Saturday. Mild north winds Saturday night shifting to 10-15 knot (5-8 m/s) winds Sunday. Gusty 15 knot (8m/s) easterlies expected Monday.



Chlorophyll concentration from satellite and forecast winds for September 16, 2005 12Z with cell concentration sampling data from September 9, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)